

Mr. John Stanford
CSE Processing, LLC
P. O. Box 323
New Haven, Indiana 46774

Re: AA 003-14203-00281
Administrative Amendment to
CP 003-8716, Plt ID 003-00281

Dear Mr. Stanford:

CSE Processing, LLC was issued a Construction Permit No.: 003-8716-00281 on April 11, 1998 for the construction of a stationary soybean processing plant, to be located at Parrot Road, New Haven, Indiana 46774. On March 28, 2001, the Office of Air Quality (OAQ) received a letter requesting that the 18 month construction deadline in the issued construction permit be extended for an additional 18 months, until September 9, 2002.

The reason for the request of an extension is that the company is still negotiating terms for the purchase of the property on which the proposed facility will be constructed. The construction deadline will be extended based on the following findings:

- (a) There are no Prevention of Significant Deterioration (PSD) increment consumption and no interim, source growth in the area that may have occurred that would cause significant degradation of air quality;
- (b) No new state regulations will be applicable to this proposed soybean processing plant; and
- (c) A new federal rule (40 CFR 63, Subpart GGGG - Solvent Extraction for Vegetable Oil Production) has been determined to be applicable to this proposed soybean processing plant.

The following conditions shall be applicable to the source in addition to the construction and operation conditions in the issued construction permit (CP003-8716-00281), and numbered as follows (additions are bolded and deletions are struck-through for emphasis):

Condition D.1.5 in the issued permit is revised to update the MACT rule citation:

D.1.5 New Facilities; General Reduction Requirements and New Source Air Toxics Control
[326 IAC 8-1-6] [326 IAC ~~2-1-3.4~~ **2-4.1**]

Pursuant to 326 IAC 8-1-6 and 326 IAC ~~2-1-3.4~~ **2-4.1**, the mineral oil absorber in conjunction with the following emission limits and control devices shall be considered the best available and maximum achievable control technology (BACT and MACT) for the soybean processing plant. The source shall comply with the following conditions:

- (a) The VOC limits shall be based on a 12-month rolling average and are as follows:

Facility	Control	VOC (Hexane) Emission and Usage Limits
Oil extractor system	mineral oil absorber	0.069 lb/ton
Meal dryer	none	0.228 lb/ton
Meal cooler	none	0.083 lb/ton
Overall usage for the first year	--	0.24 gallon/ton
Overall usage after the first year	--	0.1612 gallon/ton

- (b) The amount of soybeans processed shall not exceed 730,000 tons per year, based on a 12-month rolling total. This limit on the amount of soybeans processed in conjunction with the VOC limits will make the requirements of 326 IAC 2-2, PSD not applicable based on PM and VOC emissions as indicated in C.1.
- (c) The Permittee shall install a refrigerated condenser on the main outlet vent of the mineral oil absorber.
- (d) The Permittee shall install a soybean oil dryer in the oil distillation system to reduce residual solvent content in the oil produced.
- (e) The Best Available Control Technology (BACT) and Maximum Achievable Control Technology (MACT) for the hexane loss includes an enhanced inspection, maintenance and repair program as outlined in Condition D.1.13.
- (f) This soybean processing plant shall also minimize VOC (hexane) losses to the atmosphere by training operators and supervisors of the plant.

D.1.17 Solvent Extraction for Vegetable Oil Production NESHAP [40 CFR Part 63, Subpart GGGG]

The source is subject to 40 CFR Part 63, Subpart GGGG. A copy of this rule is attached. The source shall comply with all applicable provisions of this rule upon start up of operation. The source shall comply with the hexane limit in Condition D.1.5 of the issued construction permit, which shall satisfy the limit required in the NESHAP. Compliance with this hexane limit shall be demonstrated using the following equation found in Section 63.2840 of the NESHAP:

(1) Compliance Ratio = $\frac{\text{Actual Hap Loss}}{\text{Allowable Hap Loss}}$ (Eq. 1)

- (2) Equation 1 can also be expressed as a function of total solvent loss as shown in Equation 2 as follows:

Compliance Ratio = $\frac{f * \text{Actual Solvent Loss}}{n}$ (Eq. 2)

$$0.64 * \sum_{i=1}^3 ((\text{Oilseed})_i * (\text{SLF})_i)$$

Where:

- f** = The weighted average volume fraction of HAP in solvent received during the previous 12 operating months, as determined in § 63.2854, dimensionless.
- 0.64** = The average volume fraction of HAP in solvent in the baseline performance data, dimensionless.
- Actual Solvent Loss** = Gallons of actual solvent loss during previous 12 operating months, as determined in § 63.2853.
- Oilseed** = Tons of each oilseed type “i” processed during the previous 12 operating months, as shown in § 63.2855.
- SLF** = The corresponding solvent loss factor (gal/ton) for oilseed “i”. The source will comply with.

After 12 operating months, the source shall calculate the compliance ratio by the end of each calendar month following an operating month using Equation 2 of this section. When calculating the compliance ratio, consider the conditions and exclusions in paragraphs (b)(1) through (6) of § 63.2840.

D.1.18 Compliance Requirements [40 CFR Part 63, Subpart GGGG]

- (a) Pursuant to Part 63.2850 of this NESHAP, the source shall:
- (1) Submit the necessary notifications in accordance with § 63.2860, which include:
 - (i) Initial notifications for significant modifications to existing or new sources.
 - (ii) Notification of compliance status.
 - (2) Develop and implement a plan for demonstrating compliance in accordance with § 63.2851.
 - (3) Develop a written startup, shutdown and malfunction (SSM) plan in accordance with the provisions in § 63.2852.
 - (4) Maintain all the necessary records you have used to demonstrate compliance with this subpart in accordance with § 63.2862.
 - (5) Submit the following reports:
 - (i) Annual compliance certifications in accordance with § 63.2861(a).
 - (ii) Periodic SSM reports in accordance with § 63.2861(c).
 - (iii) Immediate SSM reports in accordance with § 63.2861(d).
 - (6) Submit all notifications and reports and maintain all records required by the General Provisions for performance testing on the control device that destroys solvent.
- (b) The source, must meet the requirements associated with one of two compliance options. Within 15 days of the startup date, the source must comply with one of the following options listed:
- (1) *Normal operation.* Upon startup of the new source, you must meet all of

the requirements listed in § 63.2850(a) and Table 1 of this section for sources under normal operation, and the schedules for demonstrating compliance for new sources under normal operation in Table 2 of this section.

- (2) ***Initial startup period.*** For up to 6 calendar months after the startup date of the new source, you must meet all of the requirements listed in paragraph (a) of this section and Table 1 of this section for sources operating under an initial startup period, and the schedules for demonstrating compliance for new sources operating under an initial startup period in Table 2 of this section. After a maximum of 6 calendar months, the new source must then meet all of the requirements listed in Table 1 of this section for sources under normal operation.

- (c) ***The source when experiencing a malfunction.*** A *malfunction* is defined in § 63.2. In general, it means any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment or process equipment to function in a usual manner. If the existing or new source experiences an unscheduled shutdown as a result of a malfunction, continues to operate during a malfunction (including the period reasonably necessary to correct the malfunction), or starts up after a shutdown resulting from a malfunction, then the source must meet the requirements associated with one of two compliance options. Routine or scheduled process startups and shutdowns resulting from, but not limited to, market demands, maintenance activities, and switching types of oilseed processed, are not startups or shutdowns resulting from a malfunction and, therefore, do not qualify for this provision. Within 15 days of the beginning date of the malfunction, the source must choose to comply with one of the following options listed:

- (1) ***Normal operation.*** The source must meet all of the requirements listed in paragraph (a) of this condition and the following:
- (a) New source normal operation requirements in section (b)(1) of this condition.
- (2) ***Malfunction period.*** Throughout the malfunction period, the source must meet all of the requirements listed in section (a) of this condition and Table 1 of § 63.2850 for sources operating during a malfunction period. At the end of the malfunction period, the source must then meet all of the requirements listed in Table 1 of § 63.2850 for sources under normal operation.

D.1.19 Compliance Plan [40 CFR Part 63, Subpart GGGG]

- (a) Pursuant § 63.2851 of this NESHAP, the source must develop and implement a written plan for demonstrating compliance that provides the detailed procedures the source will follow to monitor and record data necessary for demonstrating compliance with this subpart. Procedures followed for quantifying solvent loss from the source and amount of oilseed processed vary from source to source because of site-specific factors such as equipment design characteristics and operating conditions. Typical procedures include one or more accurate measurement methods such as weigh scales, volumetric displacement, and material mass balances. Because the industry does not have a uniform set of

procedures, the source must develop and implement a site-specific plan for demonstrating compliance before the compliance date for the source. The owner must also incorporate the plan for demonstrating compliance by reference in the source's title V permit and keep the plan on-site and readily available as long as the source is operational. If the owner make any changes to the plan for demonstrating compliance, then all previous versions of the plan must be kept and made readily available for inspection for at least 5 years after each revision. The plan for demonstrating compliance must include the following items:

- (1) The name and address of the owner or operator.
- (2) The physical address of the vegetable oil production process.
- (3) A detailed description of all methods of measurement the source will use to determine solvent losses, HAP content of solvent, and the tons of each type of oilseed processed.
- (4) When each measurement will be made.
- (5) Examples of each calculation the source will use to determine compliance status. Include examples how to convert data measured with one parameter to other terms for use in compliance determination.
- (6) Example logs of how data will be recorded.
- (7) A plan to ensure that the data continue to meet compliance demonstration needs.

- (b) IDEM, OAQ may require the source to revise the plan for demonstrating compliance. IDEM, OAQ may require reasonable revisions if the procedures lack detail, are inconsistent or do not accurately determine solvent loss, HAP content of the solvent, or the tons of oilseed processed.

D.1.20 Start up, Shutdown, and Malfunction Plan [40 CFR 63, Subpart GGGG]

Pursuant to § 63.2852, the source must develop a written SSM plan in accordance with § 63.6(e)(3) and implement the plan, when applicable.

The SSM plan must be completed before the compliance date for the source. The source must also incorporate the SSM plan by reference in the source's title V permit and keep the SSM plan on-site and readily available as long as the source is operational. The SSM plan provides detailed procedures for operating and maintaining the source to minimize emissions during a qualifying SSM event for which the source chooses the § 63.2850(e)(2) malfunction period, or the § 63.2850(c)(2) or (d)(2) initial startup period. The SSM plan must specify a program of corrective action for malfunctioning process and air pollution control equipment and reflect the best practices now in use by the industry to minimize emissions. Some or all of the procedures may come from plans the source has developed for other purposes such as a Standard Operating Procedure manual or an Occupational Safety and Health Administration Process Safety Management plan. To qualify as a SSM plan, other such plans must meet all the applicable requirements of these NESHAP.

D.1.15 Record Keeping Requirements of the issued construction permit will be revised to incorporate the record keeping requirements of the NESHAP.

D.1.15 Record Keeping Requirements

(a) through (f) No changes

- (g) To document compliance with the NESHAP, 40 CFR Part 63, Subpart GGGG -

Solvent Extraction for Vegetable Oil Production, the following information must be kept on-site and readily available as long as the source is operational:

- (1) Compliance Plan; and**
 - (2) Start up, Shutdown, and Malfunction Plan;**
- (h) (1) For the solvent inventory, the following information must be recorded in accordance with the source plan for demonstrating compliance:**
- (i) Dates that define each operating status period during a calendar month.**
 - (ii) The operating status of the source such as normal operation, nonoperating, initial startup period, malfunction period, or exempt operation for each recorded time interval.**
 - (iii) Record the gallons of extraction solvent in the inventory on the beginning and ending dates of each normal operating period.**
 - (iv) The gallons of all extraction solvent received, purchased, and recovered during each calendar month.**
 - (v) All extraction solvent inventory adjustments, additions or subtractions. The owner must document the reason for the adjustment and justify the quantity of the adjustment.**
 - (vi) The total solvent loss for each calendar month, regardless of the source operating status.**
 - (vii) The actual solvent loss in gallons for each operating month.**
- (2) For the weighted average volume fraction of HAP in the extraction solvent, the owner must record the following items:**
- (i) The gallons of extraction solvent received in each delivery.**
 - (ii) The volume fraction of each HAP exceeding 1 percent by volume in each delivery of extraction solvent.**
 - (iii) The weighted average volume fraction of HAP in extraction solvent received since the end of the last operating month as determined in accordance with § 63.2854(b)(2).**
- (3) For each type of listed oilseed processed, record the following items, in accordance with the source plan for demonstrating compliance:**
- (i) The dates that define each operating status period. These dates must be the same as the dates entered for the extraction solvent inventory.**
 - (ii) The operating status of the source such as normal operation, nonoperating, initial startup period, malfunction period, or exempt operation for each recorded time interval. On the log for each type of listed oilseed that is not being processed during a normal operating period, the owner must record which type of listed oilseed is being processed in addition to the source operating status.**
 - (iii) The oilseed inventory for the type of listed oilseed being processed on the beginning and ending dates of each normal operating period.**
 - (iv) The tons of each type of listed oilseed received at the affected**

- source each normal operating period.
 - (v) All listed oilseed inventory adjustments, additions or subtractions for normal operating periods. The owner must document the reason for the adjustment and justify the quantity of the adjustment.
 - (vi) The tons of each type of listed oilseed processed during each operating month.
- (i) After the source has processed listed oilseed for 12 operating months, and is not operating during an initial startup period as described in § 63.2850(c)(2) or (d)(2), or a malfunction period as described in § 63.2850(e)(2), the following items must be recorded by the end of the calendar month following each operating month:
 - (1) The 12 operating months rolling sum of the actual solvent loss in gallons as described in § 63.2853(c).
 - (2) The weighted average volume fraction of HAP in extraction solvent received for the previous 12 operating months as described in § 63.2854(b)(3).
 - (3) The 12 operating months rolling sum of each type of listed oilseed processed at the affected source in tons as described in § 63.2855(c).
 - (4) A determination of the compliance ratio. Using the values from §§ 63.2853, 63.2854, 63.2855, and Table 1 of § 63.2840, calculate the compliance ratio using Equation 2 of § 63.2840.
 - (5) A statement of whether the source is in compliance with all of the requirements of this subpart. This includes a determination of whether the source has met all of the applicable requirements in § 63.2850.
- (j) For each SSM event subject to an initial startup period as described in § 63.2850(c)(2) or (d)(2), or a malfunction period as described in § 63.2850(e)(2), the following items must be recorded by the end of the calendar month following each month in which the initial startup period or malfunction period occurred:
 - (1) A description and date of the SSM event, its duration, and reason it qualifies as an initial startup or malfunction.
 - (2) An estimate of the solvent loss in gallons for the duration of the initial startup or malfunction period with supporting documentation.
 - (3) A checklist or other mechanism to indicate whether the SSM plan was followed during the initial startup or malfunction period.
- (g k) All records shall be maintained in accordance with Section C - General Record Keeping Requirements of this the issued construction permit.

D.1.16 Reporting Requirements

- (a) through (c) No changes
- (d) Pursuant to § 63.2861, of the NESHAP after the initial notifications, the source must submit to the IDEM, OAQ, the following:
 - (1) *Annual compliance certifications* - The first annual compliance certification is due 12 calendar months after the notification of compliance status has been submitted. Each subsequent annual compliance certification is due

12 calendar months after the previous annual compliance certification. The annual compliance certification provides the compliance status for each operating month during the 12 calendar months period ending 60 days prior to the date on which the report is due. The annual certification shall include the following information:

- (i) The name and address of the owner or operator.**
- (ii) The physical address of the vegetable oil production process.**
- (iii) Each listed oilseed type processed during the 12 calendar months period covered by the report.**
- (iv) Each HAP identified under § 63.2854(a) as being present in concentrations greater than 1 percent by volume in each delivery of solvent received during the 12 calendar months period covered by the report.**
- (v) A statement designating the source as a major source of HAP or a demonstration that the source qualifies as an area source. An area source is a source that is not a major source and is not collocated within a plant site with other sources that are individually or collectively a major source.**
- (vi) A compliance certification to indicate whether the source was in compliance for each compliance determination made during the 12 calendar months period covered by the report. For each such compliance determination, the source must include a certification of the following items:**
 - (a) The source is following the procedures described in the plan for demonstrating compliance.**
 - (b) The compliance ratio is less than or equal to 1.00.**

- (2) *Deviation notification report* - Submit a deviation report for each compliance determination you make in which the compliance ratio exceeds 1.00 as determined under § 63.2840(c). Submit the deviation report by the end of the month following the calendar month in which the deviation has been determined. The deviation notification report must include the following items:**

- (i) The name and address of the owner or operator.**
- (ii) The physical address of the vegetable oil production process.**
- (iii) Each listed oilseed type processed during the 12 operating months period for which you determined the deviation.**
- (iv) The compliance ratio comprising the deviation. The owner may reduce the frequency of submittal of the deviation notification report if the IDEM, OAQ does not object as provided in § 63.10(e)(3)(iii).**

- (3) *Periodic startup, shutdown, and malfunction report.* If the owner chooses to operate the source under an initial startup period subject to § 63.2850(c)(2) or (d)(2) or a malfunction period subject to § 63.2850(e)(2), the owner must submit a periodic SSM report by the end of the calendar month following each month in which the initial startup period or malfunction period occurred. The periodic SSM report must include the following items:**

- (i) **The name, title, and signature of the source's responsible official who is certifying that the report accurately states that all actions taken during the initial startup or malfunction period were consistent with the SSM plan.**
 - (ii) **A description of events occurring during the time period, the date and duration of the events, and reason the time interval qualifies as an initial startup period or malfunction period.**
 - (iii) **An estimate of the solvent loss during the initial startup or malfunction period with supporting documentation.**
- (4) ***Immediate SSM reports.* If the owner handles a SSM during an initial startup period subject to § 63.2850(c)(2) or (d)(2) or a malfunction period subject to § 63.2850(e)(2) differently from procedures in the SSM plan, then owner must submit an immediate SSM report. Immediate SSM reports consist of a telephone call or facsimile transmission to the responsible agency within 2 working days after starting actions inconsistent with the SSM plan, followed by a letter within 7 working days after the end of the event. The letter must include the items in the following paragraphs:**
- (i) **The name, title, and signature of a source's responsible official who is certifying the accuracy of the report, an explanation of the event, and the reasons for not following the SSM plan.**
 - (ii) **A description and date of the SSM event, its duration, and reason it qualifies as a SSM.**
 - (iii) **An estimate of the solvent loss for the duration of the SSM event with supporting documentation.**

In order to make this additional NESHAP conditions in the issued construction permit federally enforceable, this Administrative Amendment will require 30-day public notification.

Based on the above findings, Construction Condition B.2 deadline date for the commencement of construction shall be extended to September 9, 2002. If construction does not commence on or by this date, additional approval from the Office of Air Quality (OAQ) will be required.

All other conditions of the permit shall remain unchanged and in effect. Please attach a copy of this amendment with the original permit.

Sincerely,

Original signed by

Paul Dubenetzky, Chief
Permits Branch
Office of Air Quality

APD

cc: File - Allen County
Allen County Health Department
Air Compliance Section Inspector - Jennifer Dorn
Compliance Data Section - Karen Nowak
Permit Tracking - Janet Mobley
Air Programs Section - Michelle Boner

Indiana Department of Environmental Management Office of Air Quality

Addendum to the Technical Support Document for Administrative Amendment to Construction Permit

Source Name: CSE Processing, LLC
Source Location: Parrot Road, New Haven, Indiana 46774
County: Allen
Construction Permit No.: 003 - 8716 - 00281 Issuance Date: April 9, 1998
Administrative Amendment No.: 003-14203-00281
SIC Code: 2075
Permit Reviewer: Aida De Guzman

On May 12, 2001, the Office of Air Quality (OAQ) had a notice published in the Fort Wayne Journal Gazette, Fort Wayne, Indiana, stating that CSE Processing, LLC had applied for an additional 18-month extension to the 18-month construction deadline in the issued construction permit. The notice also stated that OAQ proposed to issue an approval for the construction extension and provided information on how the public could review the proposed amendment and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this amendment should be issued as proposed.

One June 1, 2001 and June 5, 2001, the following letters with comments to the proposed Administrative Amendment were submitted:

COMMENT 1:

Ms. Delores Bandelier - I am opposing the amendment to the CSE Processing of soybean oil site. It is too close to the residents in New Haven. It is especially hazardous to our health. We have enough (too much) pollution here already.

Mr. David Yant - We are opposing the amendment to the CSE Processing of soybean oil because the site is too close to residents homes in New Haven, Indiana. This is especially hazardous to our health respiratory breathing to impact our life quality and cause hazards to our health.

The fact of wanting more leverage on the part of CSE Processing ignites big issues that they are trying which brings big questions of their real needs of really needing a larger area and in an out of the way location where the population is scant. The fact is - this is not an acceptable location and we don't want relaxed specifications which would endanger our health in New Haven.

Ms. Joyce Hetrick - I am concerned that the health of nearby people will be hazardous to their breathing and respiratory factors. Apparently, you are too, because you have hesitated in building right next door at 1/8 mile makes it not a sensible venture. You can't get the air clean enough to breath right in New Haven, Indiana. Why risk your life and my life for a few bucks. Is your life valuable? The people of New Haven are at life risk and there will be not a good situation to have respiratory problems of New Haven residents. Please don't build a health hazard.

RESPONSE 1:

One of the purposes of the Clean Air Act is to set National Ambient Air Quality Standards (NAAQS) for protecting public health, including the health of people particularly sensitive to air pollution such as young children, the elderly, and those with asthma or bronchitis. The standards are set separately for each of the criteria pollutants. The US EPA has designated Allen County as an attainment area for all of the criteria pollutants. That means that air quality currently does not

exceed the levels set by the NAAQS for particulate matter, sulfur dioxide, nitrogen oxide, ozone, carbon monoxide, and lead.

During the proposed issuance of the Construction Permit 003-8716-00281, the following investigation was done:

OAQ conducted a review generally for a significant air emission source, trying to relate the air emissions coming out of the stacks or another place at the plant to what the air quality was around the plant. The purpose was to determine if the introduction of that amount of pollutants was going to cause a concentration in the air of any of these pollutants above health-related standards. The results indicated that the concentrations of the pollutants were below the NAAQS.

IDEM has performed air pollution modeling to determine the CSE's impact on air quality. The model took into account all meteorological conditions, the stack parameters, and the building dimensions that predicted the increase in the pollution concentration at all distances beyond the property line. The U.S. EPA has developed national ambient air quality standards (NAAQS) for pollutants. For this source, PM₁₀ was modeled at 91.2 tons per year (potential emissions from process operations) and 249 tons per year (maximum allowable emissions if PM₁₀ is equivalent to PM emissions) to determine maximum impacts. The maximum predicted increases were added to representative background concentrations in units of micrograms per cubic meter (µg/m³) taken from the PM₁₀ monitor located at 2022 North Beacon in Fort Wayne. The total was compared to the PM₁₀ 24 hour and annual NAAQS at a level to protect public health and welfare with a margin of safety. The results were as follows:

PM₁₀ modeled at an emission rate of 91.2 tons per year.

	maximum concentration	background concentration	total	NAAQS
24 hour (µg/m ³)	26.7	44.7	71.2	150.0
Annual (µg/m ³)	5.3	24.0	29.3	50.0

For PM₁₀ modeled at an emission rate of 249 tons per year. The source was limited at 226 tons per year in the issued Construction Permit.

	maximum concentration	background concentration	total	NAAQS
24 hour (µg/m ³)	72.8	44.7	117.5	150.0
Annual (µg/m ³)	14.5	24.0	38.5	50.0

There were no national ambient air quality standards for hexane. The Occupational Safety and Health Administration (OSHA) developed their own standards for various air pollutants. The modeled concentration of hexane were compared to these standards. The OSHA Permissible Exposure Limit (PEL) for hexane was 1,800,000 µg/m³ for an eight hour concentration. The hexane emissions were modeled at a rate of 329 tons per year, which included all hexane losses from the plant that leaves the plant in the waste water, soybean meal, and leaks. Results showed that the eight hour maximum concentration was 2,854 µg/m³, which compared to the OSHA PEL is 0.16% of the PEL. Please, see the issued construction permit which detailed the hexane emission calculations.

Since this plant will not cause or contribute to a violation of the NAAQS and cannot exceed the NAAQS, and since the source will comply with all applicable regulations, there was no reason to believe that the particulate matter emissions will pose a health threat. The hexane emissions were also limited. Since the hexane emissions to the air were only a small fraction (0.16%) of the OSHA PEL, there was no reason to believe that hexane will pose a threat to health or safety.

Based on these results done during the issuance of the Construction Permit CP003-8716, this soybean processing plant will not cause a threat to the health and safety of those residing in the vicinity of the plant.

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for an
Amendment to a Construction Permit

Source Background and Description

Source Name:	CSE Processing, LLC		
Source Location:	Parrot Road, New Haven, Indiana 46774		
County:	Allen		
Construction Permit No.:	003-8716-00281	Issuance Date:	April 11, 1998
Administrative Amendment:	AA003-14203		
Permit Reviewer:	Aida De Guzman		

The Office of Air Quality (OAQ) has reviewed an application from CSE Processing, LLC relating to their request for an 18 month extension to commence construction.

Recommendation

The staff recommends to the Commissioner that the extension be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

A complete application for the purposes of this review was received on March 28, 2001.

Emission Calculations

There are no emission calculations associated with the proposed extension.

Potential To Emit

The proposed extension does not change the source potential to emit.

Actual Emissions

No previous emission data has been received from the source.

County Attainment Status

The source is located in Allen County.

Pollutant	Status
PM-10	Attainment
SO ₂	Attainment
NO ₂	Attainment
Ozone	Attainment
CO	Attainment
Lead	Not determined

Source Status

The proposed extension will not affect the source emissions.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This source is subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

- (a) at least one of the criteria pollutant is greater than or equal to 100 tons per year,
- (b) a single hazardous air pollutant (HAP) is greater than or equal to 10 tons per year, or
- (c) any combination of HAPs is greater than or equal to 25 tons/year.

This source shall apply for a Part 70 (Title V) operating permit within twelve (12) months after this source becomes subject to Title V.

Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) or changes to any existing NSPS due to the proposed extension.
- (b) New National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR art 63)

Since the source has not began construction, it would be subject to 40 CFR Part 63.2830, Subpart GGGG - Solvent Extraction for vegetable Oil Production upon start up of operation. This NESHAP limits the hexane emissions for the proposed soybean conventional oilseed process to 0.2 gallons of hexane lost per ton of oilseed processed.

The current limit that is in the existing permit (0.24 gallon/ton for the first year and 0.1612 gallon/ton thereafter) are more stringent than the NESHAP limit.

The source shall comply with the more stringent limits of 0.24 gallon/ton for the first year and 0.1612 gallon/ton thereafter, thus satisfying 40 CFR Part 63.2830, Subpart GGGG.

- (a)(1) Compliance with the limit shall be demonstrated using the following equation found in Section 63.2840 of the NESHAP.

$$\text{Compliance Ratio} = \frac{\text{Actual Hap Loss}}{\text{Allowable Hap Loss}} \quad (\text{Eq. 1})$$

- (2) Equation 1 of this section can also be expressed as a function of total solvent loss as shown in Equation 2 of this section. Equation 2 of this section is as follows:

$$\text{Compliance Ratio} = \frac{f * \text{Actual Solvent Loss}}{0.64 * \sum_{i=1}^3 ((\text{Oilseed})_i * (\text{SLF})_i)} \quad (\text{Eq. 2})$$

Where:

- f = The weighted average volume fraction of HAP in solvent received during the previous 12 operating months, as determined in § 63.2854, dimensionless.
- 0.64 = The average volume fraction of HAP in solvent in the baseline performance data, dimensionless.
- Actual Solvent Loss = Gallons of actual solvent loss during previous 12 operating months, as determined in § 63.2853.
- Oilseed = Tons of each oilseed type "i" processed during the previous 12 operating months, as shown in § 63.2855.
- SLF = The corresponding solvent loss factor (gal/ton) for oilseed "i". CSE will comply with 0.069 lb/ton (0.0123 gal/ton)

- (b) When the source has processed listed oilseed for 12 operating months, calculate the compliance ratio by the end of each calendar month following an operating month using Equation 2 of this section. When calculating the compliance ratio, consider the conditions and exclusions in paragraphs (b)(1) through (6) of this section:
- (1) If the source processes any quantity of listed oilseeds in a calendar month and the source is not operating under an initial startup period or malfunction period subject to § 63.2850, then you must categorize the month as an operating month, as defined in § 63.2872.
 - (2) The 12-month compliance ratio may include operating months occurring prior to a source shutdown and operating months that follow after the source resumes operation.
 - (3) If the source shuts down and processes no listed oilseed for an entire calendar month, then you must categorize the month as a nonoperating month, as defined in § 63.2872. Exclude any nonoperating months from the compliance ratio determination.
 - (4) If the source is subject to an initial startup period as defined in § 63.2872, exclude from the compliance ratio determination any solvent and oilseed information recorded for the initial startup period.
 - (5) If the source is subject to a malfunction period as defined in § 63.2872, exclude from the compliance ratio determination any solvent and oilseed information recorded for the malfunction period.
- (c) If the compliance ratio is less than or equal to 1.00, the source was in compliance with the HAP emission requirements for the previous operating month.

Compliance Requirements

- (a) Pursuant to § 63.2850, the source shall:
- (1) Submit the necessary notifications in accordance with § 63.2860, which include:
 - (i) Initial notifications for significant modifications to existing or new sources.
 - (ii) Notification of compliance status.

- (2) Develop and implement a plan for demonstrating compliance in accordance with § 63.2851.
 - (3) Develop a written startup, shutdown and malfunction (SSM) plan in accordance with the provisions in § 63.2852.
 - (4) Maintain all the necessary records you have used to demonstrate compliance with this subpart in accordance with § 63.2862.
 - (5) Submit the following reports:
 - (i) Annual compliance certifications in accordance with § 63.2861(a).
 - (ii) Periodic SSM reports in accordance with § 63.2861(c).
 - (iii) Immediate SSM reports in accordance with § 63.2861(d).
 - (6) Submit all notifications and reports and maintain all records required by the General Provisions for performance testing on the control device that destroys solvent.
- (b) *New sources.* The new source, including a source that is categorized as new due to reconstruction, must meet the requirements associated with one of two compliance options. Within 15 days of the startup date, you must choose to comply with one of the following options listed:
- (1) *Normal operation.* Upon startup of the new source, you must meet all of the requirements listed in § 63.2850(a) and Table 1 of this section for sources under normal operation, and the schedules for demonstrating compliance for new sources under normal operation in Table 2 of this section.
 - (2) *Initial startup period.* For up to 6 calendar months after the startup date of the new source, you must meet all of the requirements listed in paragraph (a) of this section and Table 1 of this section for sources operating under an initial startup period, and the schedules for demonstrating compliance for new sources operating under an initial startup period in Table 2 of this section.
After a maximum of 6 calendar months, the new source must then meet all of the requirements listed in Table 1 of this section for sources under normal operation.
- (c) *Existing or new sources experiencing a malfunction.* A *malfunction* is defined in § 63.2. In general, it means any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment or process equipment to function in a usual manner. If the existing or new source experiences an unscheduled shutdown as a result of a malfunction, continues to operate during a malfunction (including the period reasonably necessary to correct the malfunction), or starts up after a shutdown resulting from a malfunction, then you must meet the requirements associated with one of two compliance options. Routine or scheduled process startups and shutdowns resulting from, but not limited to, market demands, maintenance activities, and switching types of oilseed processed, are not startups or shutdowns resulting from a malfunction and, therefore, do not qualify for this provision. Within 15 days of the beginning date of the malfunction, the source must choose to comply with one of the following options listed:

- (1) *Normal operation.* The source must meet all of the requirements listed in paragraph (a) of this section and the following:
 - (a) New source normal operation requirements in paragraph (c)(1) of this section.
- (2) *Malfunction period.* Throughout the malfunction period, the source must meet all of the requirements listed in paragraph (a) of this section and Table 1 of this section for sources operating during a malfunction period. At the end of the malfunction period, the source must then meet all of the requirements listed in Table 1 of § 63.2850 for sources under normal operation.

Compliance Plan

- (a) Pursuant § 63.2851 the source must develop and implement a written plan for demonstrating compliance that provides the detailed procedures the source will follow to monitor and record data necessary for demonstrating compliance with this subpart. Procedures followed for quantifying solvent loss from the source and amount of oilseed processed vary from source to source because of site-specific factors such as equipment design characteristics and operating conditions. Typical procedures include one or more accurate measurement methods such as weigh scales, volumetric displacement, and material mass balances. Because the industry does not have a uniform set of procedures, the source must develop and implement a site-specific plan for demonstrating compliance before the compliance date for the source. The owner must also incorporate the plan for demonstrating compliance by reference in the source's title V permit and keep the plan on-site and readily available as long as the source is operational. If the owner make any changes to the plan for demonstrating compliance, then all previous versions of the plan must be kept and made readily available for inspection for at least 5 years after each revision. The plan for demonstrating compliance must include the following items:
 - (1) The name and address of the owner or operator.
 - (2) The physical address of the vegetable oil production process.
 - (3) A detailed description of all methods of measurement the source will use to determine solvent losses, HAP content of solvent, and the tons of each type of oilseed processed.
 - (4) When each measurement will be made.
 - (5) Examples of each calculation the source will use to determine compliance status. Include examples how to convert data measured with one parameter to other terms for use in compliance determination.
 - (6) Example logs of how data will be recorded.
 - (7) A plan to ensure that the data continue to meet compliance demonstration needs.
- (b) IDEM, OAQ may require the source to revise the plan for demonstrating compliance. IDEM, OAQ may require reasonable revisions if the procedures lack detail, are inconsistent or do not accurately determine solvent loss, HAP content of the solvent, or the tons of oilseed processed.

Startup, Shutdown, and Malfunction Plan

Pursuant to § 63.2852, the source must develop a written SSM plan in accordance with § 63.6(e)(3) and implement the plan, when applicable.

The SSM plan must be completed before the compliance date for the source. The source must also incorporate the SSM plan by reference in the source's title V permit and keep the SSM plan on-site and readily available as long as the source is operational. The SSM plan provides detailed procedures for operating and maintaining the source to minimize emissions during a qualifying SSM event for which the source chooses the § 63.2850(e)(2) malfunction period, or the § 63.2850(c)(2) or (d)(2) initial startup period. The SSM plan must specify a program of corrective action for malfunctioning process and air pollution control equipment and reflect the best practices now in use by the industry to minimize emissions. Some or all of the procedures may come from plans the source has developed for other purposes such as a Standard Operating Procedure manual or an Occupational Safety and Health Administration Process Safety Management plan. To qualify as a SSM plan, other such plans must meet all the applicable requirements of these NESHAP.

Notifications, Reports, and Records

Pursuant to § 63.2860, the source must submit the following one-time notification:

- (a) *Initial notifications for new and reconstructed sources.* New or reconstructed sources must submit a series of notifications before, during, and after source construction per the schedule listed in § 63.9. The information requirements for the notifications are the same as those listed in the General Provisions.
- (b) *Notification of compliance status.* The new source must submit a notification of compliance status report to the IDEM, OAQ no later than 60 days after determining the initial 12 operating months compliance ratio, and no later than 20 calendar months after initial startup (6 calendar months for the initial startup period, 12 operating months to record data, and 2 calendar months to complete the report). The notification of compliance status must contain the items in paragraphs (d)(1) through (6) of this section:
 - (1) The name and address of the owner or operator.
 - (2) The physical address of the vegetable oil production process.
 - (3) Each listed oilseed type processed during the previous 12 operating months.
 - (4) Each HAP identified under § 63.2854(a) as being present in concentrations greater than 1 percent by volume in each delivery of solvent received during the 12 operating months period used for the initial compliance determination.
 - (5) A statement designating the source as a major source of HAP or a demonstration that the source qualifies as an area source. An area source is a source that is not a major source and is not collocated within a plant site with other sources that are individually or collectively a major source.
 - (6) A compliance certification indicating whether the source complied with all of the requirements of this subpart throughout the 12 operating months used for the initial source compliance determination. This

certification must include a certification of the following items:

- (a) The plan for demonstrating compliance (as described in § 63.2851) and SSM plan (as described in § 63.2852) are complete and available on-site for inspection.
- (b) You are following the procedures described in the plan for demonstrating compliance.
- (c) The compliance ratio is less than or equal to 1.00.

Reports

Pursuant to § 63.2861, after the initial notifications, the source must submit to the IDEM, OAQ, the following:

- (a) *Annual compliance certifications* - The first annual compliance certification is due 12 calendar months after the notification of compliance status has been submitted. Each subsequent annual compliance certification is due 12 calendar months after the previous annual compliance certification. The annual compliance certification provides the compliance status for each operating month during the 12 calendar months period ending 60 days prior to the date on which the report is due. The annual certification shall include the following information:
 - (1) The name and address of the owner or operator.
 - (2) The physical address of the vegetable oil production process.
 - (3) Each listed oilseed type processed during the 12 calendar months period covered by the report.
 - (4) Each HAP identified under § 63.2854(a) as being present in concentrations greater than 1 percent by volume in each delivery of solvent received during the 12 calendar months period covered by the report.
 - (5) A statement designating the source as a major source of HAP or a demonstration that the source qualifies as an area source. An area source is a source that is not a major source and is not collocated within a plant site with other sources that are individually or collectively a major source.
 - (6) A compliance certification to indicate whether the source was in compliance for each compliance determination made during the 12 calendar months period covered by the report. For each such compliance determination, the source must include a certification of the following items:
 - (i) The source is following the procedures described in the plan for demonstrating compliance.
 - (ii) The compliance ratio is less than or equal to 1.00.
- (b) *Deviation notification report* - Submit a deviation report for each compliance determination you make in which the compliance ratio exceeds 1.00 as determined under § 63.2840(c). Submit the deviation report by the end of the month following the calendar month in which the deviation has been determined. The deviation notification report must include the following items:
 - (1) The name and address of the owner or operator.

- (2) The physical address of the vegetable oil production process.
 - (3) Each listed oilseed type processed during the 12 operating months period for which you determined the deviation.
 - (4) The compliance ratio comprising the deviation. The owner may reduce the frequency of submittal of the deviation notification report if the IDEM, OAQ does not object as provided in § 63.10(e)(3)(iii).
- (c) *Periodic startup, shutdown, and malfunction report.* If the owner chooses to operate the source under an initial startup period subject to § 63.2850(c)(2) or (d)(2) or a malfunction period subject to § 63.2850(e)(2), the owner must submit a periodic SSM report by the end of the calendar month following each month in which the initial startup period or malfunction period occurred. The periodic SSM report must include the following items:
- (1) The name, title, and signature of the source's responsible official who is certifying that the report accurately states that all actions taken during the initial startup or malfunction period were consistent with the SSM plan.
 - (2) A description of events occurring during the time period, the date and duration of the events, and reason the time interval qualifies as an initial startup period or malfunction period.
 - (3) An estimate of the solvent loss during the initial startup or malfunction period with supporting documentation.
- (d) *Immediate SSM reports.* If the owner handles a SSM during an initial startup period subject to § 63.2850(c)(2) or (d)(2) or a malfunction period subject to § 63.2850(e)(2) differently from procedures in the SSM plan, then owner must submit an immediate SSM report. Immediate SSM reports consist of a telephone call or facsimile transmission to the responsible agency within 2 working days after starting actions inconsistent with the SSM plan, followed by a letter within 7 working days after the end of the event. The letter must include the items in The following paragraphs:
- (1) The name, title, and signature of a source's responsible official who is certifying the accuracy of the report, an explanation of the event, and the reasons for not following the SSM plan.
 - (2) A description and date of the SSM event, its duration, and reason it qualifies as a SSM.
 - (3) An estimate of the solvent loss for the duration of the SSM event with supporting documentation.

Record Keeping

- (a) Pursuant to § 63.2862, the source must satisfy the record keeping requirements of this section by the compliance date of the source specified in § 63.2834.
- (b) Prepare a plan for demonstrating compliance (as described in § 63.2851) and a SSM plan (as described in § 63.2852). In these two plans, describe the procedures that the source will follow in obtaining and recording data, and determining compliance under normal operations or a SSM subject to the § 63.2850(c)(2) or (d)(2) initial startup period or the § 63.2850(e)(2) malfunction period. Complete both plans before the compliance date for the source and keep them on-site and readily available as long as the source is operational.

- (c) If the source processes any of the following listed oilseed:
- (1) For the solvent inventory, record the following information in accordance with the source plan for demonstrating compliance:
 - (i) Dates that define each operating status period during a calendar month.
 - (ii) The operating status of the source such as normal operation, nonoperating, initial startup period, malfunction period, or exempt operation for each recorded time interval.
 - (iii) Record the gallons of extraction solvent in the inventory on the beginning and ending dates of each normal operating period.
 - (iv) The gallons of all extraction solvent received, purchased, and recovered during each calendar month.
 - (v) All extraction solvent inventory adjustments, additions or subtractions. The owner must document the reason for the adjustment and justify the quantity of the adjustment.
 - (vi) The total solvent loss for each calendar month, regardless of the source operating status.
 - (vii) The actual solvent loss in gallons for each operating month.
 - (2) For the weighted average volume fraction of HAP in the extraction solvent, the owner must record the following items:
 - (i) The gallons of extraction solvent received in each delivery.
 - (ii) The volume fraction of each HAP exceeding 1 percent by volume in each delivery of extraction solvent.
 - (iii) The weighted average volume fraction of HAP in extraction solvent received since the end of the last operating month as determined in accordance with § 63.2854(b)(2).
 - (3) For each type of listed oilseed processed, record the following items, in accordance with the source plan for demonstrating compliance:
 - (i) The dates that define each operating status period. These dates must be the same as the dates entered for the extraction solvent inventory.
 - (ii) The operating status of the source such as normal operation, nonoperating, initial startup period, malfunction period, or exempt operation for each recorded time interval. On the log for each type of listed oilseed that is not being processed during a normal operating period, the owner must record which type of listed oilseed is being processed in addition to the source operating status.
 - (iii) The oilseed inventory for the type of listed oilseed being processed on the beginning and ending dates of each normal operating period.
 - (iv) The tons of each type of listed oilseed received at the affected source each normal operating period.
 - (v) All listed oilseed inventory adjustments, additions or subtractions for normal operating periods. The owner must document the reason for the adjustment and justify the quantity

- of the adjustment.
 - (vi) The tons of each type of listed oilseed processed during each operating month.
- (d) After the source has processed listed oilseed for 12 operating months, and is not operating during an initial startup period as described in § 63.2850(c)(2) or (d)(2), or a malfunction period as described in § 63.2850(e)(2), the following items must be recorded by the end of the calendar month following each operating month:
 - (1) The 12 operating months rolling sum of the actual solvent loss in gallons as described in § 63.2853(c).
 - (2) The weighted average volume fraction of HAP in extraction solvent received for the previous 12 operating months as described in § 63.2854(b)(3).
 - (3) The 12 operating months rolling sum of each type of listed oilseed processed at the affected source in tons as described in § 63.2855(c).
 - (4) A determination of the compliance ratio. Using the values from §§ 63.2853, 63.2854, 63.2855, and Table 1 of § 63.2840, calculate the compliance ratio using Equation 2 of § 63.2840.
 - (5) A statement of whether the source is in compliance with all of the requirements of this subpart. This includes a determination of whether the source has met all of the applicable requirements in § 63.2850.
- (e) For each SSM event subject to an initial startup period as described in § 63.2850(c)(2) or (d)(2), or a malfunction period as described in § 63.2850(e)(2), the following items must be recorded by the end of the calendar month following each month in which the initial startup period or malfunction period occurred:
 - (1) A description and date of the SSM event, its duration, and reason it qualifies as an initial startup or malfunction.
 - (2) An estimate of the solvent loss in gallons for the duration of the initial startup or malfunction period with supporting documentation.
 - (3) A checklist or other mechanism to indicate whether the SSM plan was followed during the initial startup or malfunction period.
- (f) Pursuant to § 63.2863, the source records (1) must be in a form suitable and readily available for review in accordance with § 63.10(b)(1).
 - (2) As specified in § 63.10(b)(1), each record must be kept for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. (c) The source must keep each record on-site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, in accordance with § 63.10(b)(1). Records can be kept off-site for the remaining 3 years.

State Rule Applicability - Entire Source

326 IAC 2-4.1 (MACT Requirements):

The source, which has not begun construction, has requested that an 18 month extension be granted for the date of commencement of construction. Since the source has not begun construction, review of the permit is required to determine if any new applicable requirements or changes in the current permit requirements are required, and if a more stringent MACT (BACT)

requirements have been established since the date of issuance of the permit.

Changes to the Construction Permit

Note: Additions are bolded and deletions are struck-through for emphasis

1. Upon review of the permit, 326 IAC 2-1-3.4 (Major Sources of Hazardous Air Pollutants) requirement in the issued construction permit will be revised to reflect the new citation, 326 IAC 2-4.1.

Based on review of the CSE MACT(BACT) and the most recent MACT(BACT) for a similar source, it is determined that there have been no changes in the limitations. The results of the comparison are listed below:

Facility	Most Recent MACT(BACT) Limits	CSE Limits
Oil Extractor	0.076 lb/ton grain processed	0.069 lb/ton grain processed
Meal Dryers	0.228 lb/ton grain processed	0.228 lb/ton grain processed
Meal Cooler	0.083 lb/ton grain processed	0.083 lb/ton grain processed
Overall First Year Usage	0.20 gallon Hexane/ton	0.24 gallon Hexane/ton
Overall Usage After First Year	0.16 gallon Hexane/ton	0.1612 gallon Hexane/ton

Condition D.1.5 in the issued permit is revised to update the MACT rule citation:

- D.1.5 New Facilities; General Reduction Requirements and New Source Air Toxics Control [326 IAC 8-1-6] [326 IAC ~~2-1-3.4~~ **2-4.1**]

Pursuant to 326 IAC 8-1-6 and 326 IAC ~~2-1-3.4~~ **2-4.1**, the mineral oil absorber in conjunction with the following emission limits and control devices shall be considered the best available and maximum achievable control technology (BACT and MACT) for the soybean processing plant. The source shall comply with the following conditions:

- (a) The VOC limits shall be based on a 12-month rolling average and are as follows:

Facility	Control	VOC (Hexane) Emission and Usage Limits
Oil extractor system	mineral oil absorber	0.069 lb/ton
Meal dryer	none	0.228 lb/ton
Meal cooler	none	0.083 lb/ton
Overall usage for the first year	--	0.24 gallon/ton
Overall usage after the first year	--	0.1612 gallon/ton

- (b) The amount of soybeans processed shall not exceed 730,000 tons per year, based on a 12-month rolling total. This limit on the amount of soybeans

processed in conjunction with the VOC limits will make the requirements of 326 IAC 2-2, PSD not applicable based on PM and VOC emissions as indicated in C.1.

- (c) The Permittee shall install a refrigerated condenser on the main outlet vent of the mineral oil absorber.
- (d) The Permittee shall install a soybean oil dryer in the oil distillation system to reduce residual solvent content in the oil produced.
- (e) The Best Available Control Technology (BACT) and Maximum Achievable Control Technology (MACT) for the hexane loss includes an enhanced inspection, maintenance and repair program as outlined in Condition D.1.13.
- (f) This soybean processing plant shall also minimize VOC (hexane) losses to the atmosphere by training operators and supervisors of the plant.

2. Since the source is subject to 40 CFR Part 63, Subpart GGGG - National Emission Standards for Hazardous Air Pollutants (NESHAP) for Solvent Extraction for Vegetable Oil Production, the following conditions are added to construction permit CP 003-8716-00281 issued on April 9, 1998, and be numbered as follows:

D.1.17 Solvent Extraction for Vegetable Oil Production NESHAP [40 CFR Part 63, Subpart GGGG]

The source is subject to 40 CFR Part 63, Subpart GGGG. A copy of this rule is attached. The source shall comply with all applicable provisions of this rule upon start up of operation. The source shall comply with the hexane limit in Condition D.1.5 of the issued construction permit, which shall satisfy the limit required in the NESHAP. Compliance with this hexane limit shall be demonstrated using the following equation found in Section 63.2840 of the NESHAP:

(1) Compliance Ratio = $\frac{\text{Actual Hap Loss}}{\text{Allowable Hap Loss}}$ (Eq. 1)

- (2) Equation 1 can also be expressed as a function of total solvent loss as shown in Equation 2 as follows:

Compliance Ratio = $\frac{f * \text{Actual Solvent Loss}}{0.64 * \sum_{i=1}^3 ((\text{Oilseed})_i * (\text{SLF})_i)}$ (Eq. 2)

$$0.64 * \sum_{i=1}^3 ((\text{Oilseed})_i * (\text{SLF})_i)$$

Where:

f = The weighted average volume fraction of HAP in solvent received during the previous 12 operating months, as determined in § 63.2854, dimensionless.

0.64 = The average volume fraction of HAP in solvent in the baseline performance data, dimensionless.

Actual Solvent Loss = Gallons of actual solvent loss during previous 12 operating months, as determined in § 63.2853.

Oilseed = Tons of each oilseed type "i" processed during the previous 12 operating months, as shown in § 63.2855.

SLF = The corresponding solvent loss factor (gal/ton) for oilseed "i". The

source will comply with.

After 12 operating months, the source shall calculate the compliance ratio by the end of each calendar month following an operating month using Equation 2 of this section. When calculating the compliance ratio, consider the conditions and exclusions in paragraphs (b)(1) through (6) of § 63.2840.

D.1.18 Compliance Requirements [40 CFR Part 63, Subpart GGGG]

- (a) Pursuant to Part 63.2850 of this NESHAP, the source shall:
 - (1) Submit the necessary notifications in accordance with § 63.2860, which include:
 - (i) Initial notifications for significant modifications to existing or new sources.
 - (ii) Notification of compliance status.
 - (2) Develop and implement a plan for demonstrating compliance in accordance with § 63.2851.
 - (3) Develop a written startup, shutdown and malfunction (SSM) plan in accordance with the provisions in § 63.2852.
 - (4) Maintain all the necessary records you have used to demonstrate compliance with this subpart in accordance with § 63.2862.
 - (5) Submit the following reports:
 - (i) Annual compliance certifications in accordance with § 63.2861(a).
 - (ii) Periodic SSM reports in accordance with § 63.2861(c).
 - (iii) Immediate SSM reports in accordance with § 63.2861(d).
 - (6) Submit all notifications and reports and maintain all records required by the General Provisions for performance testing on the control device that destroys solvent.
- (b) The source, must meet the requirements associated with one of two compliance options. Within 15 days of the startup date, the source must comply with one of the following options listed:
 - (1) *Normal operation.* Upon startup of the new source, you must meet all of the requirements listed in § 63.2850(a) and Table 1 of this section for sources under normal operation, and the schedules for demonstrating compliance for new sources under normal operation in Table 2 of this section.
 - (2) *Initial startup period.* For up to 6 calendar months after the startup date of the new source, you must meet all of the requirements listed in paragraph (a) of this section and Table 1 of this section for sources operating under an initial startup period, and the schedules for demonstrating compliance for new sources operating under an initial startup period in Table 2 of this section. After a maximum of 6 calendar months, the new source must then meet all of the requirements listed in Table 1 of this section for sources under normal operation.
- (c) The *source when experiencing a malfunction.* A *malfunction* is defined in § 63.2. In general, it means any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment or process equipment to function in a usual manner. If the existing or new source experiences an unscheduled

shutdown as a result of a malfunction, continues to operate during a malfunction

(including the period reasonably necessary to correct the malfunction), or starts up after a shutdown resulting from a malfunction, then the source must meet the requirements associated with one of two compliance options. Routine or scheduled process startups and shutdowns resulting from, but not limited to, market demands, maintenance activities, and switching types of oilseed processed, are not startups or shutdowns resulting from a malfunction and, therefore, do not qualify for this provision. Within 15 days of the beginning date of the malfunction, the source must choose to comply with one of the following options listed:

- (1) **Normal operation.** The source must meet all of the requirements listed in paragraph (a) of this condition and the following:
 - (i) New source normal operation requirements in section (b)(1) of this condition.
- (2) **Malfunction period.** Throughout the malfunction period, the source must meet all of the requirements listed in section (a) of this condition and Table 1 of § 63.2850 for sources operating during a malfunction period. At the end of the malfunction period, the source must then meet all of the requirements listed in Table 1 of § 63.2850 for sources under normal operation.

D.1.19 Compliance Plan [40 CFR Part 63, Subpart GGGG]

- (a) Pursuant § 63.2851 of this NESHAP, the source must develop and implement a written plan for demonstrating compliance that provides the detailed procedures the source will follow to monitor and record data necessary for demonstrating compliance with this subpart. Procedures followed for quantifying solvent loss from the source and amount of oilseed processed vary from source to source because of site-specific factors such as equipment design characteristics and operating conditions. Typical procedures include one or more accurate measurement methods such as weigh scales, volumetric displacement, and material mass balances. Because the industry does not have a uniform set of procedures, the source must develop and implement a site-specific plan for demonstrating compliance before the compliance date for the source. The owner must also incorporate the plan for demonstrating compliance by reference in the source's title V permit and keep the plan on-site and readily available as long as the source is operational. If the owner make any changes to the plan for demonstrating compliance, then all previous versions of the plan must be kept and made readily available for inspection for at least 5 years after each revision. The plan for demonstrating compliance must include the following items:
 - (1) The name and address of the owner or operator.
 - (1) The physical address of the vegetable oil production process.
 - (3) A detailed description of all methods of measurement the source will use to determine solvent losses, HAP content of solvent, and the tons of each type of oilseed processed.
 - (4) When each measurement will be made.
 - (5) Examples of each calculation the source will use to determine compliance status. Include examples how to convert data measured with one parameter to other terms for use in compliance determination.

- (6) **Example logs of how data will be recorded.**
 - (7) **A plan to ensure that the data continue to meet compliance demonstration needs.**
- (b) **IDEM, OAQ may require the source to revise the plan for demonstrating compliance. IDEM, OAQ may require reasonable revisions if the procedures lack detail, are inconsistent or do not accurately determine solvent loss, HAP content of the solvent, or the tons of oilseed processed.**

D.1.20 Start up, Shutdown, and Malfunction Plan [40 CFR 63, Subpart GGGG]

Pursuant to § 63.2852, the source must develop a written SSM plan in accordance with § 63.6(e)(3) and implement the plan, when applicable.

The SSM plan must be completed before the compliance date for the source. The source must also incorporate the SSM plan by reference in the source's title V permit and keep the SSM plan on-site and readily available as long as the source is operational. The SSM plan provides detailed procedures for operating and maintaining the source to minimize emissions during a qualifying SSM event for which the source chooses the § 63.2850(e)(2) malfunction period, or the § 63.2850(c)(2) or (d)(2) initial startup period. The SSM plan must specify a program of corrective action for malfunctioning process and air pollution control equipment and reflect the best practices now in use by the industry to minimize emissions. Some or all of the procedures may come from plans the source has developed for other purposes such as a Standard Operating Procedure manual or an Occupational Safety and Health Administration Process Safety Management plan. To qualify as a SSM plan, other such plans must meet all the applicable requirements of these NESHAP.

- 3. D.1.15 Record Keeping Requirements of the issued construction permit will be revised to incorporate the record keeping requirements of the NESHAP.

D.1.15 Record Keeping Requirements

(a) through (f) No changes

- (g) **To document compliance with the NESHAP, 40 CFR Part 63, Subpart GGGG - Solvent Extraction for Vegetable Oil Production, the following information must be kept on-site and readily available as long as the source is operational:**
 - (1) **Compliance Plan; and**
 - (2) **Start up, Shutdown, and Malfunction Plan;**
- (h) (1) **For the solvent inventory, the following information must be recorded in accordance with the source plan for demonstrating compliance:**
 - (i) **Dates that define each operating status period during a calendar month.**
 - (ii) **The operating status of the source such as normal operation, nonoperating, initial startup period, malfunction period, or exempt operation for each recorded time interval.**
 - (iii) **Record the gallons of extraction solvent in the inventory on the beginning and ending dates of each normal operating period.**
 - (iv) **The gallons of all extraction solvent received, purchased, and recovered during each calendar month.**
 - (v) **All extraction solvent inventory adjustments, additions or subtractions. The owner must document the reason for the adjustment and justify the quantity of the adjustment.**

- (vi) The total solvent loss for each calendar month, regardless of the source operating status.
 - (vii) The actual solvent loss in gallons for each operating month.
- (2) For the weighted average volume fraction of HAP in the extraction solvent, the owner must record the following items:
 - (i) The gallons of extraction solvent received in each delivery.
 - (ii) The volume fraction of each HAP exceeding 1 percent by volume in each delivery of extraction solvent.
 - (iii) The weighted average volume fraction of HAP in extraction solvent received since the end of the last operating month as determined in accordance with § 63.2854(b)(2).
- (3) For each type of listed oilseed processed, record the following items, in accordance with the source plan for demonstrating compliance:
 - (i) The dates that define each operating status period. These dates must be the same as the dates entered for the extraction solvent inventory.
 - (ii) The operating status of the source such as normal operation, nonoperating, initial startup period, malfunction period, or exempt operation for each recorded time interval. On the log for each type of listed oilseed that is not being processed during a normal operating period, the owner must record which type of listed oilseed is being processed in addition to the source operating status.
 - (iii) The oilseed inventory for the type of listed oilseed being processed on the beginning and ending dates of each normal operating period.
 - (iv) The tons of each type of listed oilseed received at the affected source each normal operating period.
 - (v) All listed oilseed inventory adjustments, additions or subtractions for normal operating periods. The owner must document the reason for the adjustment and justify the quantity of the adjustment.
 - (vi) The tons of each type of listed oilseed processed during each operating month.
- (i) After the source has processed listed oilseed for 12 operating months, and is not operating during an initial startup period as described in § 63.2850(c)(2) or (d)(2), or a malfunction period as described in § 63.2850(e)(2), the following items must be recorded by the end of the calendar month following each operating month:
 - (1) The 12 operating months rolling sum of the actual solvent loss in gallons as described in § 63.2853(c).
 - (2) The weighted average volume fraction of HAP in extraction solvent received for the previous 12 operating months as described in § 63.2854(b)(3).
 - (3) The 12 operating months rolling sum of each type of listed oilseed processed at the affected source in tons as described in § 63.2855(c).
 - (4) A determination of the compliance ratio. Using the values from §§ 63.2853, 63.2854, 63.2855, and Table 1 of § 63.2840, calculate the compliance ratio

- using Equation 2 of § 63.2840.
- (5) A statement of whether the source is in compliance with all of the requirements of this subpart. This includes a determination of whether the source has met all of the applicable requirements in § 63.2850.
- (j) For each SSM event subject to an initial startup period as described in § 63.2850(c)(2) or (d)(2), or a malfunction period as described in § 63.2850(e)(2), the following items must be recorded by the end of the calendar month following each month in which the initial startup period or malfunction period occurred:
- (1) A description and date of the SSM event, its duration, and reason it qualifies as an initial startup or malfunction.
 - (2) An estimate of the solvent loss in gallons for the duration of the initial startup or malfunction period with supporting documentation.
 - (3) A checklist or other mechanism to indicate whether the SSM plan was followed during the initial startup or malfunction period.
- (g k) All records shall be maintained in accordance with Section C - General Record Keeping Requirements of this the issued construction permit.

D.1.16 Reporting Requirements

- (a) through (c) No changes
- (d) Pursuant to § 63.2861, of the NESHAP after the initial notifications, the source must submit to the IDEM, OAQ, the following:
- (1) **Annual compliance certifications** - The first annual compliance certification is due 12 calendar months after the notification of compliance status has been submitted. Each subsequent annual compliance certification is due 12 calendar months after the previous annual compliance certification. The annual compliance certification provides the compliance status for each operating month during the 12 calendar months period ending 60 days prior to the date on which the report is due. The annual certification shall include the following information:
 - (i) The name and address of the owner or operator.
 - (ii) The physical address of the vegetable oil production process.
 - (iii) Each listed oilseed type processed during the 12 calendar months period covered by the report.
 - (iv) Each HAP identified under § 63.2854(a) as being present in concentrations greater than 1 percent by volume in each delivery of solvent received during the 12 calendar months period covered by the report.
 - (v) A statement designating the source as a major source of HAP or a demonstration that the source qualifies as an area source. An area source is a source that is not a major source and is not collocated within a plant site with other sources that are individually or collectively a major source.
 - (vi) A compliance certification to indicate whether the source was in compliance for each compliance determination made during the 12 calendar months period covered by the report. For each such compliance determination, the source must include a certification of the following items:

- (a) The source is following the procedures described in the plan for demonstrating compliance.
 - (b) The compliance ratio is less than or equal to 1.00.
- (2) ***Deviation notification report*** - Submit a deviation report for each compliance determination you make in which the compliance ratio exceeds 1.00 as determined under § 63.2840(c). Submit the deviation report by the end of the month following the calendar month in which the deviation has been determined. The deviation notification report must include the following items:
 - (i) The name and address of the owner or operator.
 - (ii) The physical address of the vegetable oil production process.
 - (iii) Each listed oilseed type processed during the 12 operating months period for which you determined the deviation.
 - (iv) The compliance ratio comprising the deviation. The owner may reduce the frequency of submittal of the deviation notification report if the IDEM, OAQ does not object as provided in § 63.10(e)(3)(iii).
- (3) ***Periodic startup, shutdown, and malfunction report***. If the owner chooses to operate the source under an initial startup period subject to § 63.2850(c)(2) or (d)(2) or a malfunction period subject to § 63.2850(e)(2), the owner must submit a periodic SSM report by the end of the calendar month following each month in which the initial startup period or malfunction period occurred. The periodic SSM report must include the following items:
 - (i) The name, title, and signature of the source's responsible official who is certifying that the report accurately states that all actions taken during the initial startup or malfunction period were consistent with the SSM plan.
 - (ii) A description of events occurring during the time period, the date and duration of the events, and reason the time interval qualifies as an initial startup period or malfunction period.
 - (iii) An estimate of the solvent loss during the initial startup or malfunction period with supporting documentation.
- (4) ***Immediate SSM reports***. If the owner handles a SSM during an initial startup period subject to § 63.2850(c)(2) or (d)(2) or a malfunction period subject to § 63.2850(e)(2) differently from procedures in the SSM plan, then owner must submit an immediate SSM report. Immediate SSM reports consist of a telephone call or facsimile transmission to the responsible agency within 2 working days after starting actions inconsistent with the SSM plan, followed by a letter within 7 working days after the end of the event. The letter must include the items in the following paragraphs:
 - (i) The name, title, and signature of a source's responsible official who is certifying the accuracy of the report, an explanation of the event, and the reasons for not following the SSM plan.
 - (ii) A description and date of the SSM event, its duration, and reason it qualifies as a SSM.
 - (iii) An estimate of the solvent loss for the duration of the SSM event with supporting documentation.

In order to make this additional NESHAP conditions in the issued construction permit federally enforceable, this Administrative Amendment will require 30-day public notification.

State Rule Applicability - Individual Facilities

There are no new state individual facility rules that become applicable as a result of the proposed extension.

Conclusion

The extension of the date of commencement of construction shall be subject to the conditions of the attached **Administrative Amendment No. 003-14203-00281**.